الم الا vertical direction of said phosphor screen is made relatively smaller than the preliminary vertical deflection force when an electron beam is deflected toward the middle portion in the vertical direction of said phosphor screen, so that an upper and lower pincushion distortion in a peripheral portion in the vertical direction is increased, and

wherein said upper and lower pincushion distortion in the peripheral portion in the vertical direction is corrected by a deflection magnetic field generated by said deflection yoke, thereby correcting an upper and lower inner pincushion distortion in said middle portion in the vertical direction.